RF TEST REPORT for Intentional Radiator
No. 160502089SHA-002

Applicant	:	Hansong(Nanjing) Technology Ltd 8th Kangping Road, Jiangning Economy&Technology Development Zone, Nanjing, 211106, China
Manufacturer	:	Hansong(Nanjing) Technology Ltd 8th Kangping Road, Jiangning Economy&Technology Development Zone, Nanjing, 211106, China
Product Name	:	Wireless module
Type/Model	:	HSDWAM83

SUMMARY

The equipment complies with the requirements according to the following standard(s):

47CFR Part 15 (2015): Radio Frequency Devices

ANSI C63.10 (2013): American National Standard for Testing Unlicensed Wireless Devices

RSS-247 Issue 1 (May 2015): Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

RSS-Gen Issue 4 (December 2014): General Requirements for Compliance of Radio Apparatus

Date of issue: June 24, 2016

Prepared by:

Wade Zhang (*Project Engineer*)

Reviewed by:

Daniel Zhao (*Reviewer*)

Description of Test Facility

Name:	Intertek Testing Services Limited Shanghai
Address:	Building No.86, 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
FCC Registration Number:	236597
IC Assigned Code:	2042B-1
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Content

1. Test Summary

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Test Items	FCC Reference	IC REFERANCE	Result
Minimum 6dB Bandwidth	15.247(a)(2)	RSS-247 Issue 1 Annex 5.2	Pass
Output power	15.247(b)	RSS-247 Issue 1 Annex 5.4	Pass
Power spectrum density	15.247(e)	RSS-247 Issue 1 Annex 5.2	Pass
Radiated emission	15.205 & 15.209	RSS-Gen Issue 4 Clause 8.9	Pass
Emission outside the frequency band	15.247(d)	RSS-247 Issue 1 Annex 5.5	Pass
Power line conducted emission	15.207	RSS-Gen Issue 4 Clause 8.8	NA
Occupied bandwidth	-	RSS-Gen Issue 4 Clause 6.6	Tested

Note: NA =Not Applicable

2. General Information

2.1 Applicant Information

Applicant	:	Hansong(Nanjing) Technology Ltd 8th Kangping Road, Jiangning Economy&Technology Development Zone, Nanjing, 211106, China
Name of contact	:	Anya Sun
Tel	:	0086-025-66604242
Fax	:	0086-025-66612098
Manufacturer	:	Hansong(Nanjing) Technology Ltd 8th Kangping Road, Jiangning Economy&Technology Development Zone, Nanjing, 211106, China

2.2 Identification of the EUT

Equipment	:	Wireless module
Type/model	:	HSDWAM83
FCC ID	:	XCO-HSDWAM83
IC	:	7756A-HSDWAM83

2.3 Technical specification

Operation Frequency Band	:	2412~2464 MHz
Type of Modulation	:	QPSK
Channel Number	:	3 channels in this band: 2412 MHz, 2438 MHz, 2464 MHz,
Description of EUT	:	The EUT is wireless module(1TX,2RX) for data transmission which support band 2412-2464 MHz&5180-5240 MHz&5736-5814 MHz and have 9 channels total(2412MHz, 2438 MHz, 2464 MHz, 5736 MHz, 5762MHz, 5814, MHz 5180 MHz, 5210 MHz, 5240 MHz).We tested it and listed the 2412 ~ 2464 MHz band results in this report.
Port identification	:	NA
Antenna	:	

Model	Type	Gain (dBi)	Frequency band(GHz)
Integral	PIFA	1.5	2.4-2.5
		1.5	5.1-5.9
RC8WFI10042A	mono antenna	3.6	2.4-2.5
		3.8	5.1-5.9
RC1WFI0901A	PIFA	4.2	2.4-2.5
		4.5	5.1-5.9

Rating	:	DC 3.5V
Declared Temperature range	:	0°C ~ 50°C
Category of EUT	:	Class B
EUT type	:	☒ Table top☐ Floor standing
Sample received date	:	2016.05.18
Sample Identification No	:	/
Date of test	:	2016.05.18 ~ 2016.06.06

3. Test Specification

3.1 Instrument list

Selected	Equipment	Type	Manu.	Internal no.	Cal. Date	Due date
☒	PXA Analyzer	N9030A	Agilent	EC5338	2016/3/4	2017/3/3
☒	Vector SG	N5182B	Agilent	EC5175	2016/3/4	2017/3/3
☒	Power sensor	U2021XA	Agilent	EC5338-1	2016/3/4	2017/3/3
☒	MXG Analog SG	N5181A	Agilent	EC5338-2	2016/3/4	2017/3/3
☒	Power meter	N1911A/N1921A	Agilent	EC4318	2016/4/10	2017/4/9
☒	EMI Receiver	ESCS 30	R&S	EC 2107	2015/10/20	2016/10/19
☒	A.M.N.	ESH2-Z5	R&S	EC 3119	2015/12/16	2017/12/15
☒	I.S.N.	FCC-TLISN-T8-02	FCC	EC3756	2016/2/16	2017/2/15
☒	EMI chamber	3m	Albatross	EC 3048	2016/5/5	2017/5/4
☒	Test Receiver	ESIB 26	R&S	EC 3045	2015/10/20	2016/10/19
☒	Test Receiver	ESCI 7	R&S	EC4501	2016/2/24	2017/2/23
☒	Bilog Antenna	CBL 6112D	TESEQ	EC 4206	2015/6/1	2016/5/30
☒	Horn antenna	HF 906	R&S	EC 3049	2015/9/12	2016/9/11
☒	Horn antenna	HAP18-26W	TOYO	EC 4792-3	2014/6/12	2017/6/11
☒	Pre-amplifier	Pre-amp 18	R&S	EC 5262	2014/5/25	2016/5/24
☒	Pre-amplifier	Tpa0118-40	R&S	EC 4792-2	2016/4/11	2017/4/10
☒	Shielded room	-	Zhongyu	EC 2838	2016/1/9	2017/1/8

3.2 Test Standard

47CFR Part 15 (2015): Radio Frequency Devices

ANSI C63.10 (2013): American National Standard for Testing Unlicensed Wireless Devices

RSS-247 Issue 1 (May 2015): Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

RSS-Gen Issue 4 (December 2014): General Requirements for Compliance of Radio Apparatus

3.3 Mode of operation during the test / Test peripherals used

Within this test report, EUT was tested under 120V/60Hz (supplied by a control board with AC-DC adaptor). The EUT has transmitting as well as receiving modes, so both were assessed.

While testing transmitting mode of EUT, the internal modulation was used.

While testing receiving mode of EUT, the signal generator was employed to generate continuous answer signal.

Radiated emission testing was performed for three different antennas

Test peripherals used:

Item No	Description	Band and Model	S/No
1	Mini-PCI control board	HanSang	NA
2	Adaptor	GPE	NA
Note: NA			

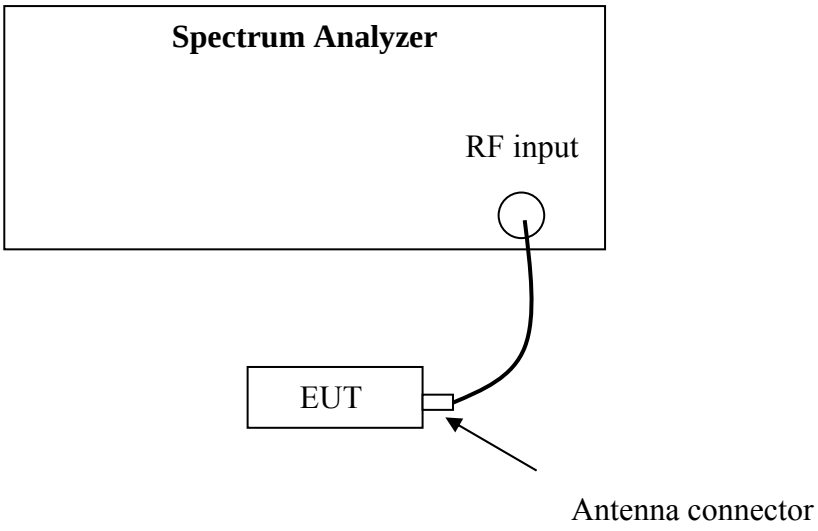
4. Minimum 6dB Bandwidth

Test result: PASS

4.1 Limit

For systems using digital modulation techniques that may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz and 5725 - 5850 MHz bands, the minimum 6 dB bandwidth shall be at least 500 kHz.

4.2 Test Configuration



4.3 Test Procedure and test setup

The minimum 6dB bandwidth per FCC §15.247(a)(2) is measured using the Spectrum Analyzer according to DTS test procedure of "KDB558074 D01 DTS Meas Guidance v03r05" for compliance to FCC 47CFR 15.247 requirements(clause 8.2).

a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

4.4 Test Protocol

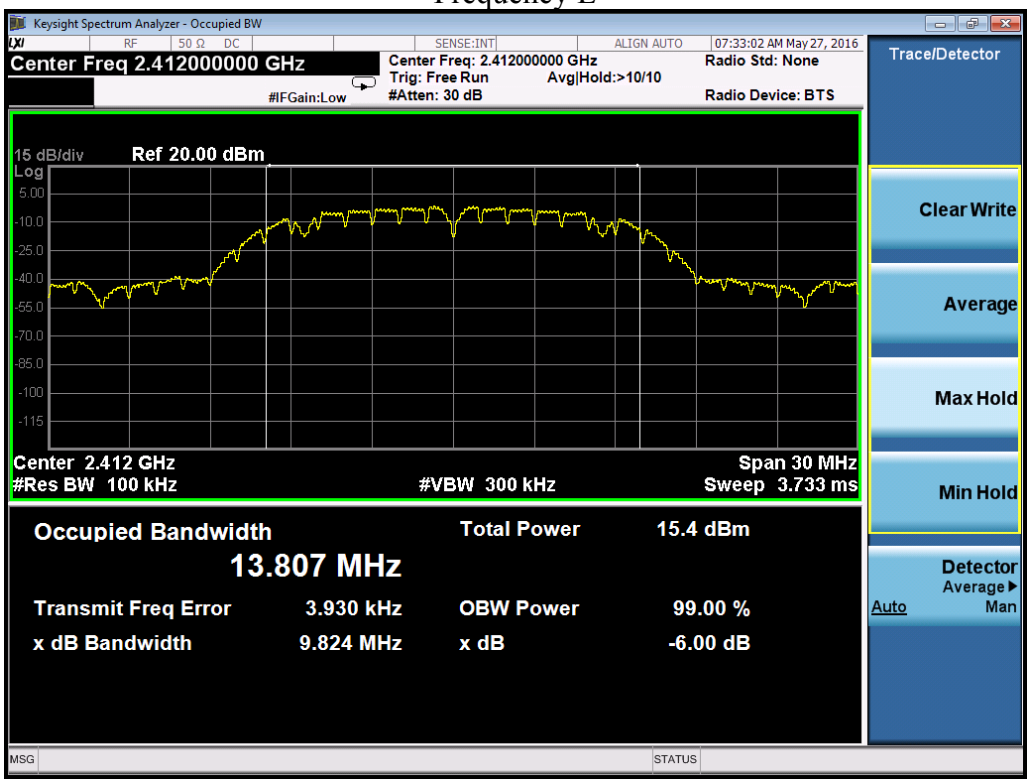
Temperature: 22°C
Relative Humidity: 53%

Test frequency (MHz)	6dB Bandwidth (MHz)		Limit (MHz)
	Port A	Port B	
2412	9.824	9.822	⩾0.5
2438	9.823	9.822	
2464	9.823	9.823	

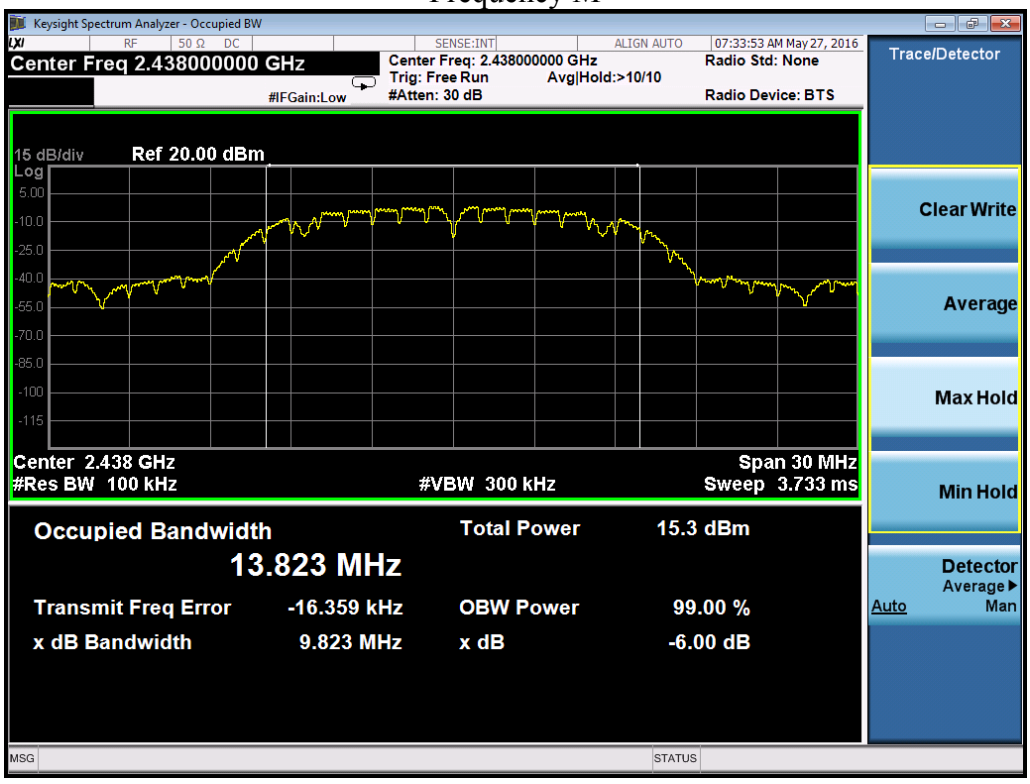
Test plot as follows:

Port A

Frequency L



Frequency M

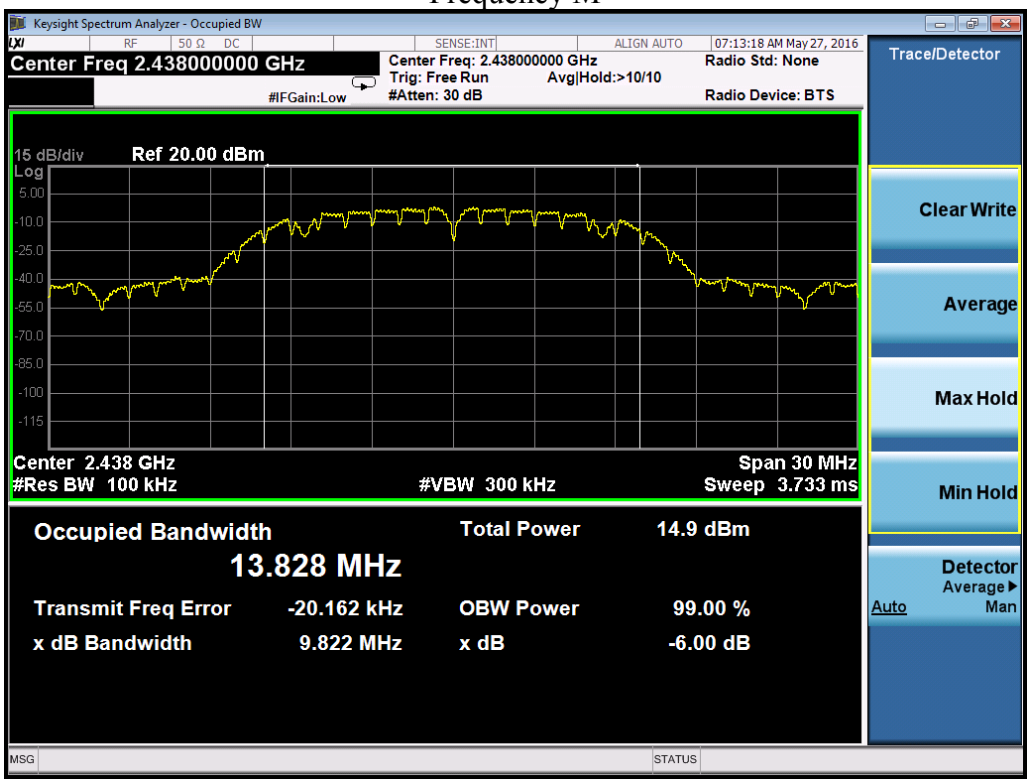


Frequency H

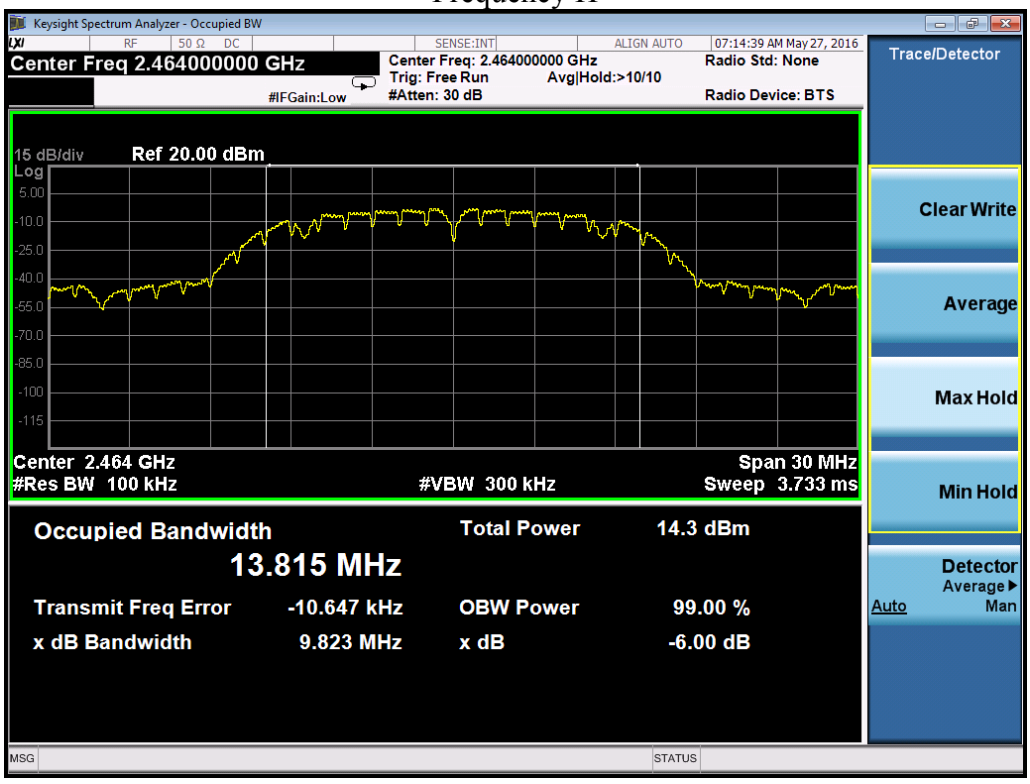
Port B

Frequency L

Frequency M



Frequency H



5. Maximum Conducted Output power

Test result: Pass

5.1 Test limit

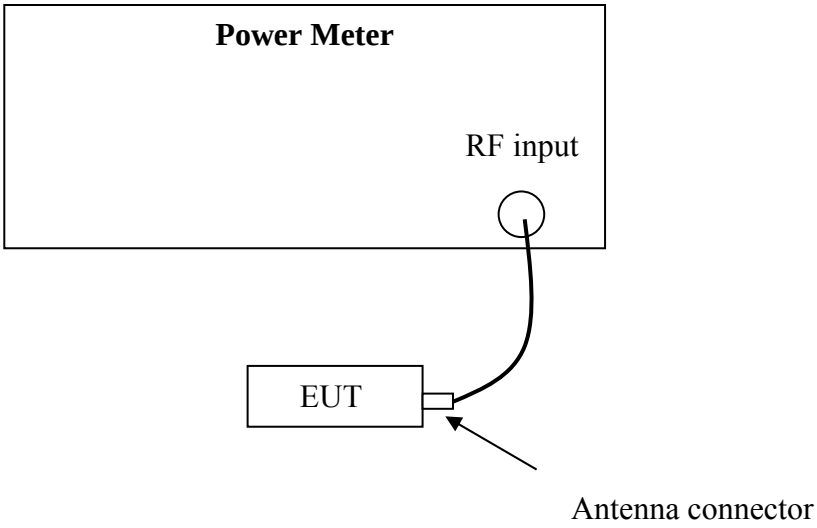
☐ For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt

☐ For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts

☒ For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.

If the transmitting antenna of directional gain greater than 6dBi is used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. If there have a beam forming type, the limit should be the minimum of 30dBm and 30+ (6 –antenna gain-beam forming gain).

5.2 Test Configuration



5.3 Test procedure and test setup

The EUT was tested according to DTS test procedure of "KDB558074 D01 DTS Meas Guidance v03r05" for compliance to FCC 47CFR 15.247 requirements (clause 9.1.2).

5.4 Test protocol

Temperature: 22 °C
Relative Humidity: 53 %

Test frequency (MHz)	Cable loss (dB)	Measured output power (dBm)		Limit (dBm)
		Port A	Port B	
2412	0.50	**19.49**	19.48	≤30
2438	0.50	18.85	18.78	
2464	0.50	18.11	18.02	

2412 – 2464 MHz: The maximum EIRP of the EUT = 19.49dBm + 4.2dBi = 23.69 dBm = 233.88 mW which is lower than the EIRP limit (4W) of RSS-247.

6. Power spectrum density

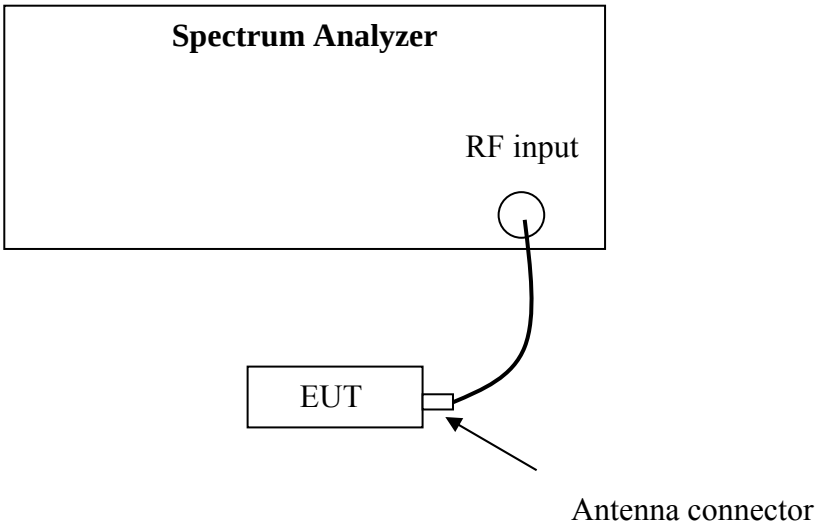
Test result: **Pass**

6.1 Test limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission.

If the transmitting antenna of directional gain greater than 6dBi is used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. If there have a beam forming type, the limit should be the minimum of 8dBm/MHz and 8+ (6 – antenna gain-beam forming gain).

6.2 Test Configuration



6.3 Test procedure and test setup

The power output per FCC §15.247(e) was tested according to DTS test procedure of "KDB558074 D01 DTS Meas Guidance v03r05" (clause 10.2 Method PKPSD) for compliance to FCC 47CFR 15.247 requirements.

1) Set analyzer center frequency to DTS channel center frequency.
2) Set the span to 1.5 times the DTS bandwidth.
3) Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
4) Set the VBW ≥ 3 × RBW.
5) Detector = peak.
6) Sweep time = auto couple.
7) Trace mode = max hold.
8) Allow trace to fully stabilize.
9) Use the peak marker function to determine the maximum amplitude level within the RBW.
10) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

6.4 Test Protocol

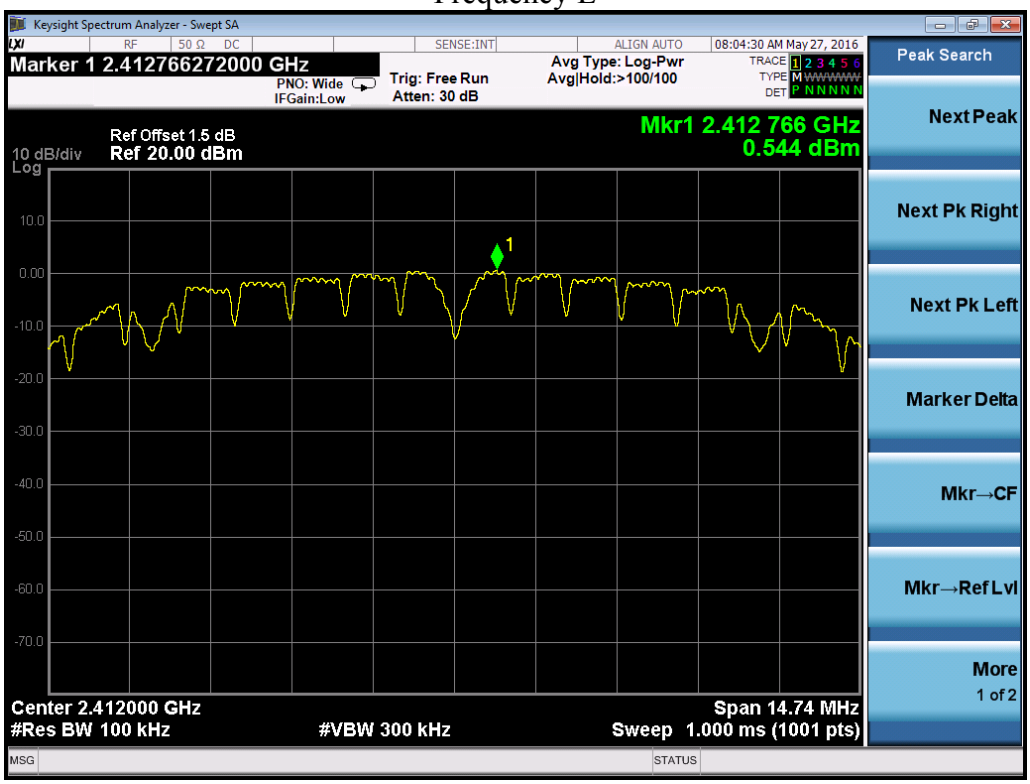
Temperature: 22 °C
Relative Humidity: 53 %

Test frequency (MHz)	Cable loss (dB)	Spectrum Density (dBm/100kHz)		Limit (dBm/3kHz)
		Port A	Port B	
2412	0.50	0.544	-0.081	≤8.00
2438	0.50	-0.230	-0.720	
2464	0.50	-0.264	-0.844	

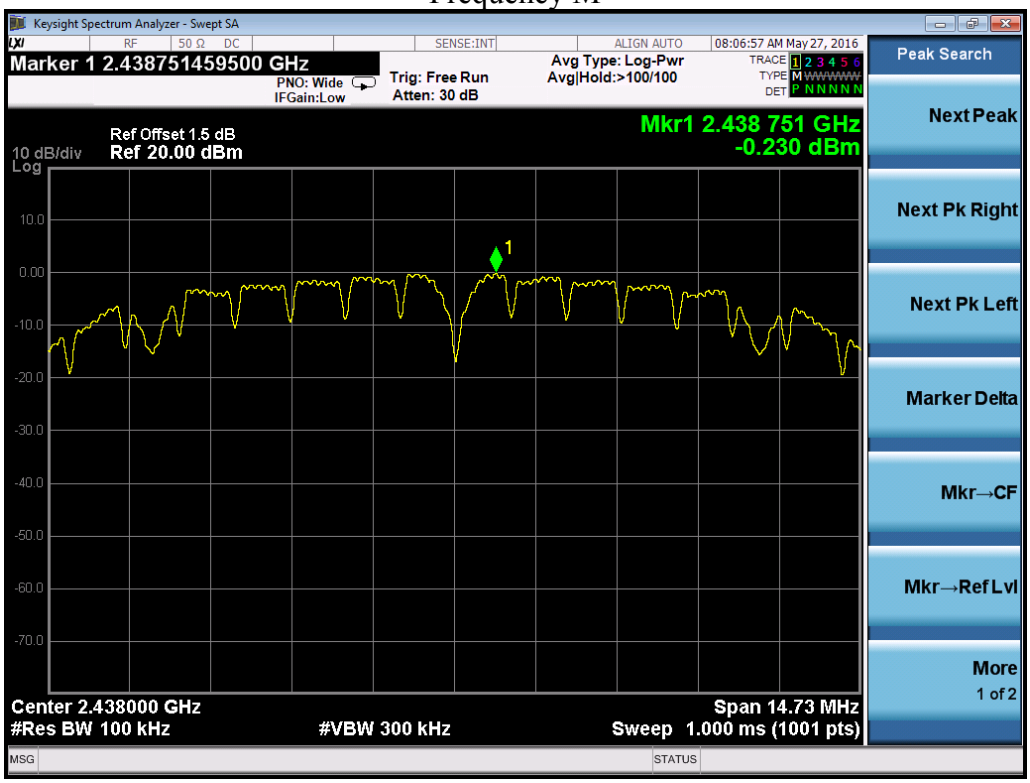
Test plot as follows:

Port A

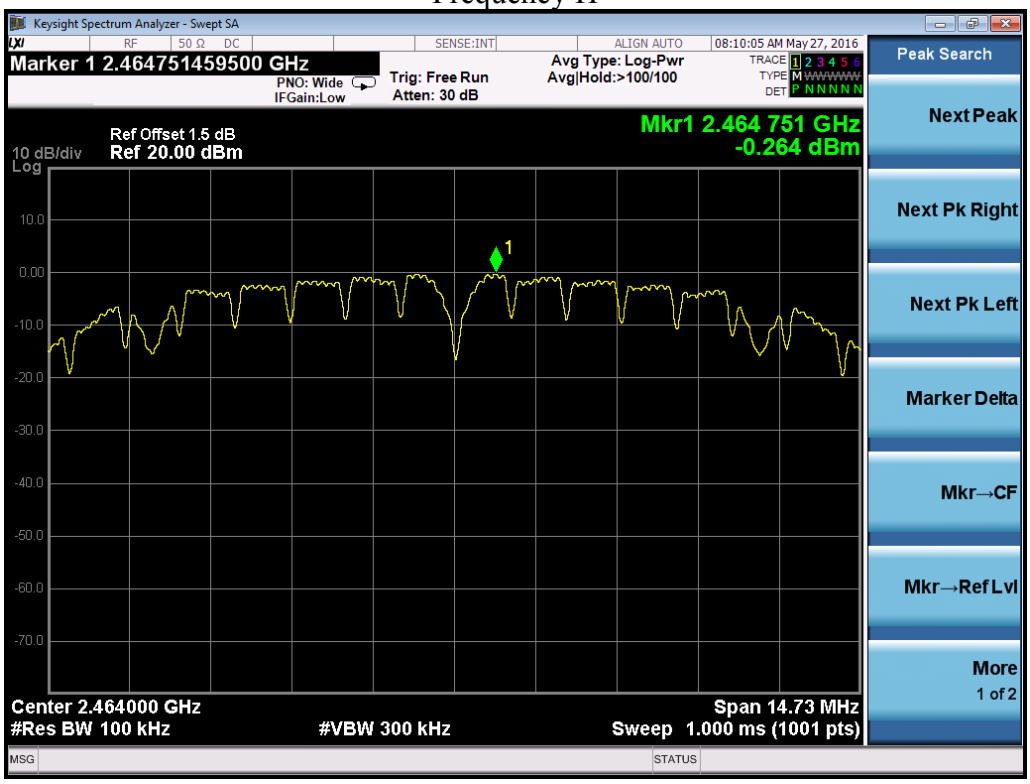
Frequency L



Frequency M

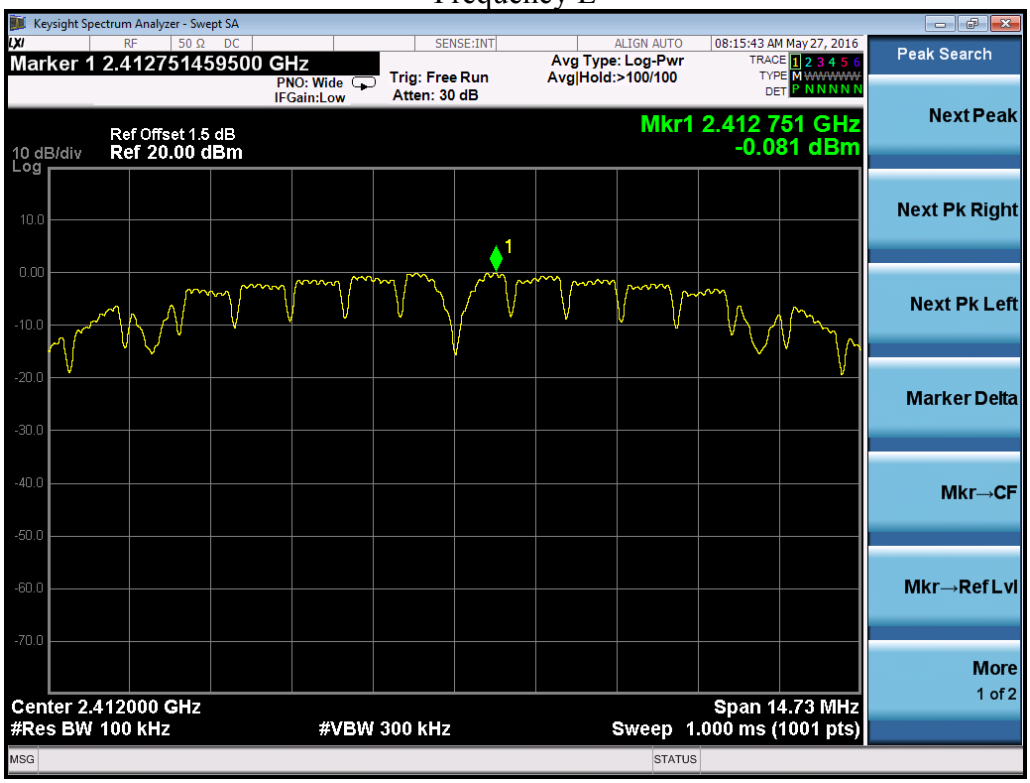


Frequency H



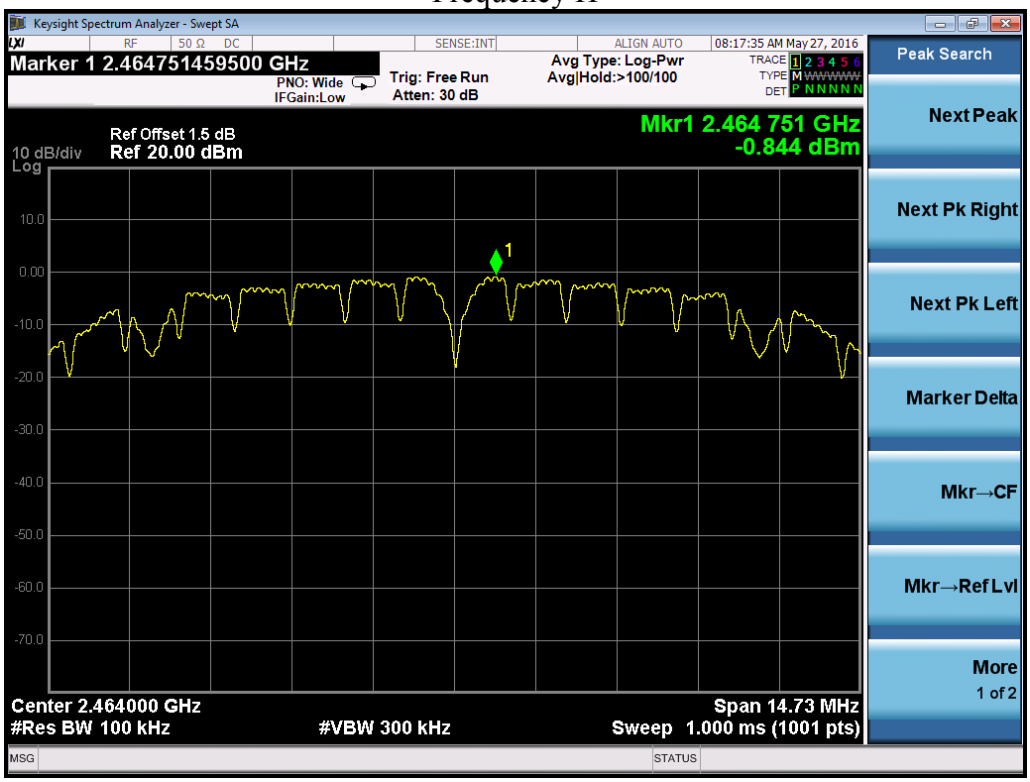
Port B

Frequency L



Frequency M

Frequency H



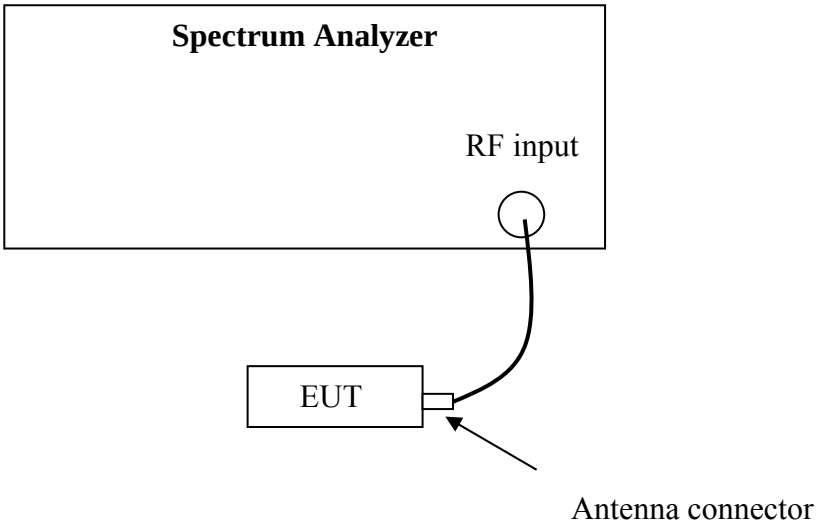
7. Emissions in non-restricted frequency bands

Test result: **Pass**

7.1 Test limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

7.2 Test Configuration



7.3 Test procedure and test setup

The Emission outside the frequency Band per FCC § 15.247(d) is measured using the Spectrum Analyzer with the resolutions bandwidth set at 100kHz, the video bandwidth set at 300kHz, and the SPAN>>RBW.

The EUT was tested according to DTS test procedure of "KDB558074 D01 DTS Meas Guidance v03r05" (clause 11.0) for compliance to FCC 47CFR 15.247 requirements.

7.4 Test Protocol

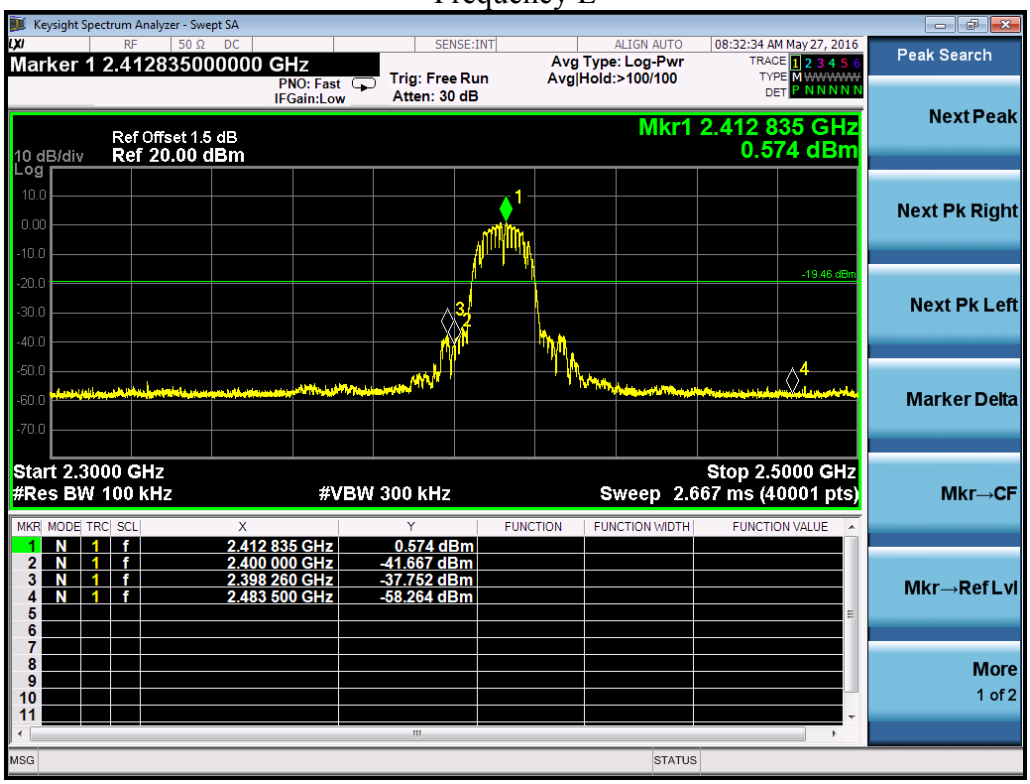
Temperature: 22 °C
Relative Humidity: 53 %

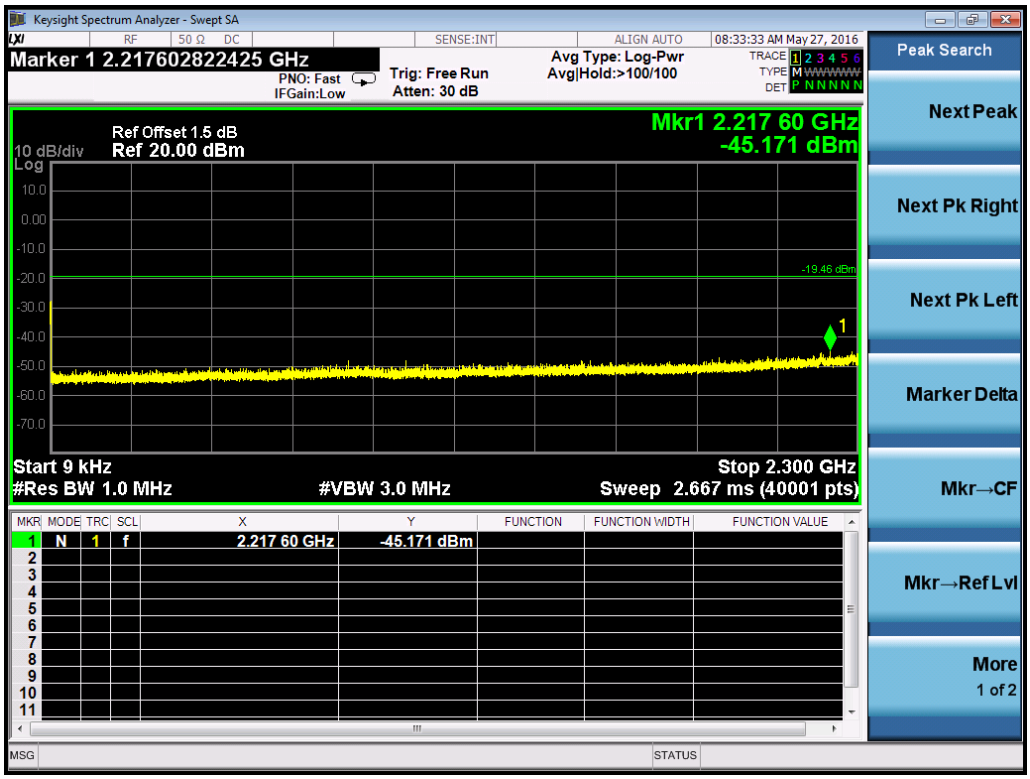
Frequency (MHz)	Results		Limit
	Port A	Port B	
2412	Pass	Pass	>20dB
2438	Pass	Pass	
2464	Pass	Pass	

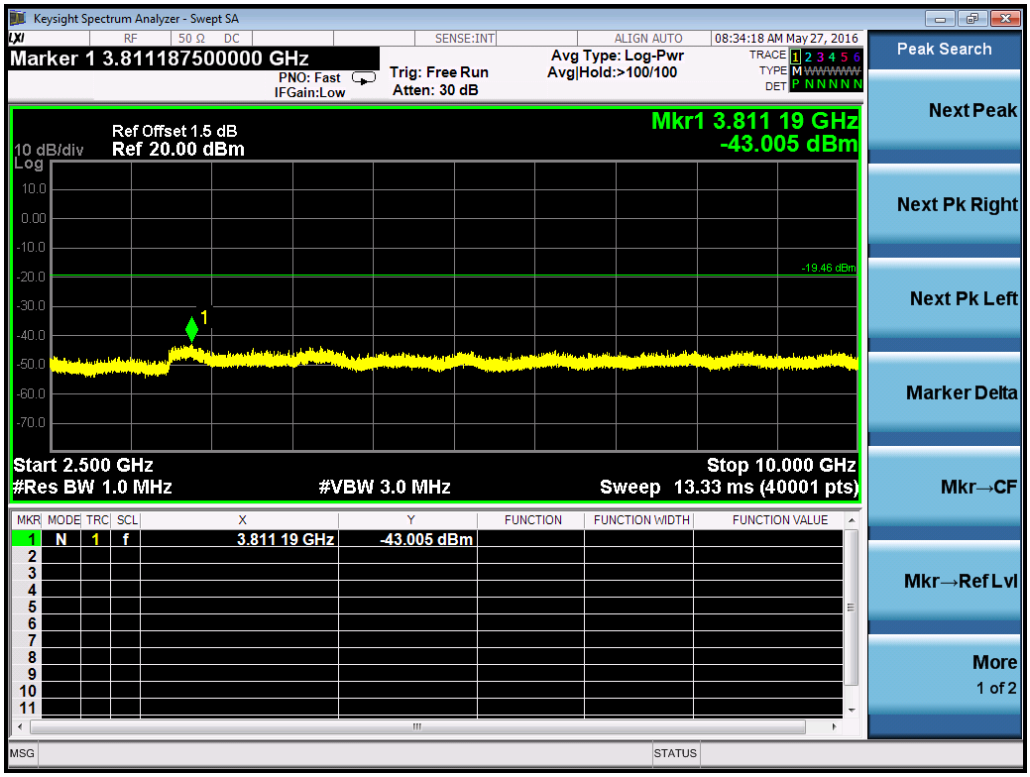
Test plot as follows:

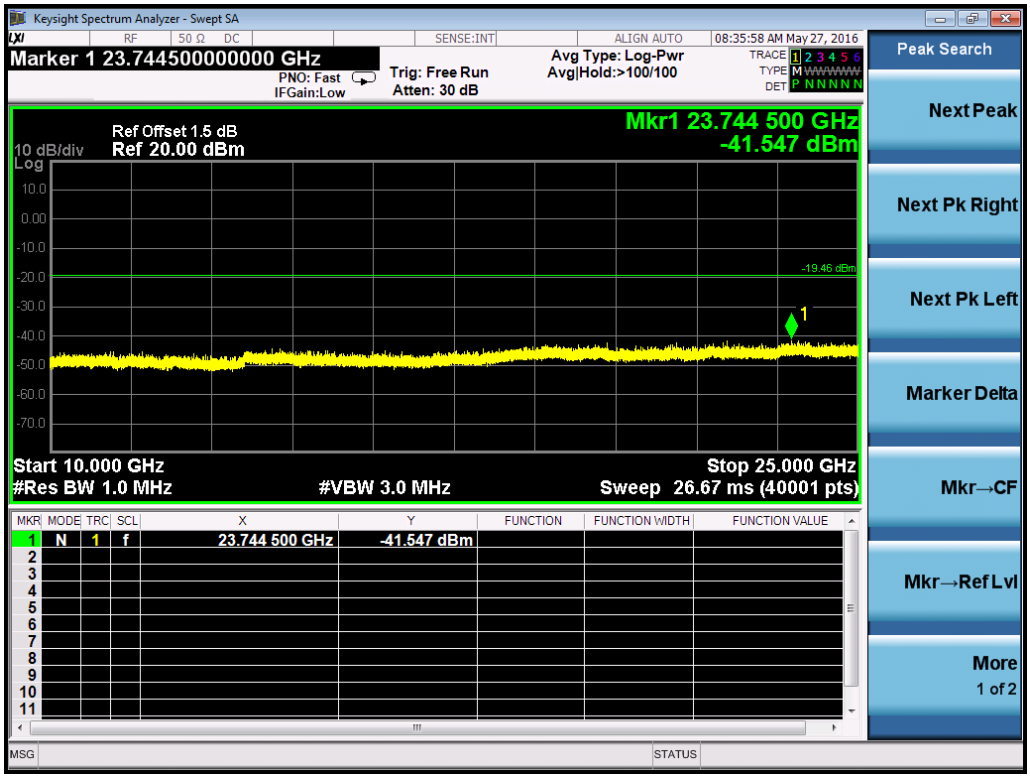
Port A

Frequency L

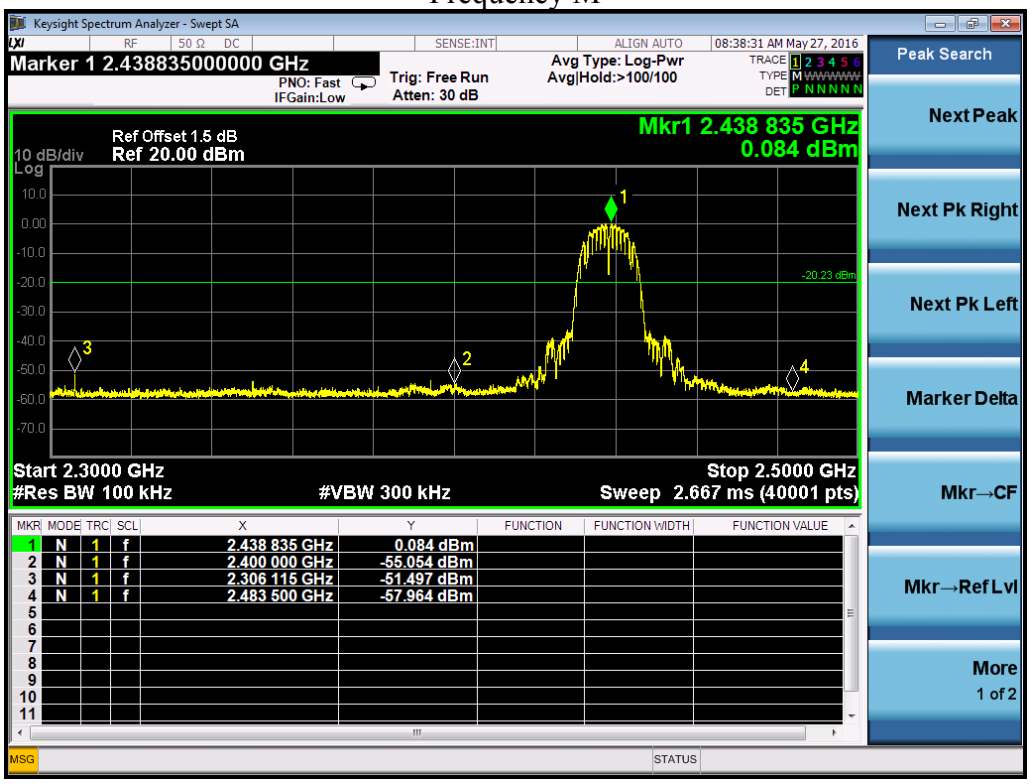


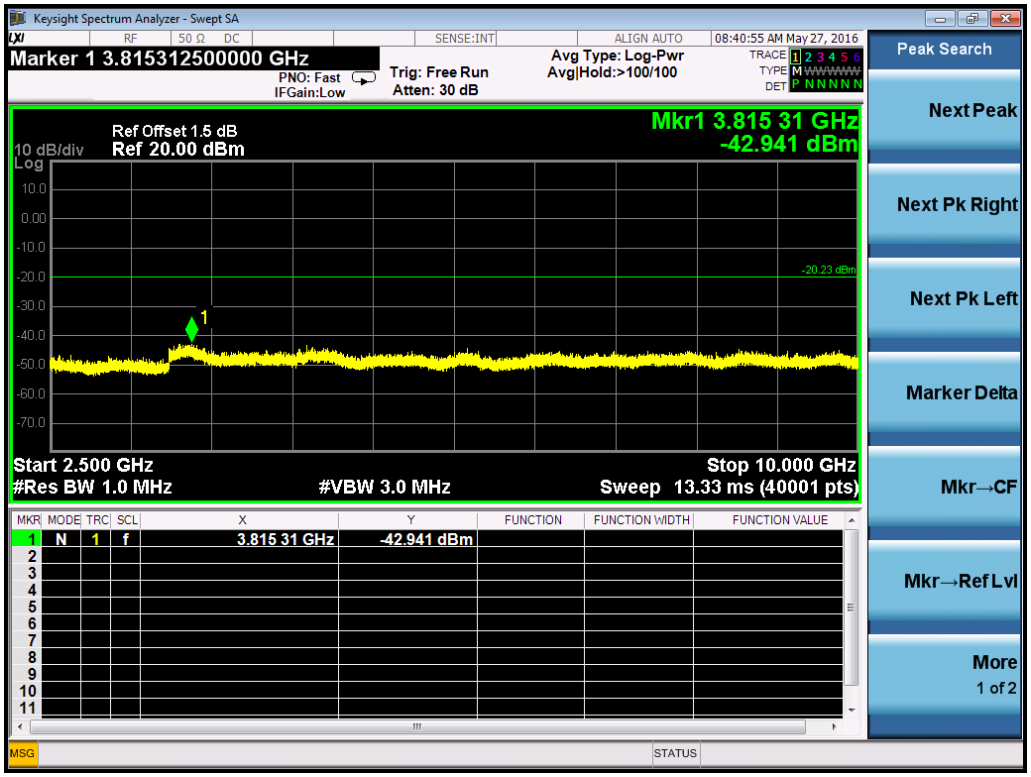


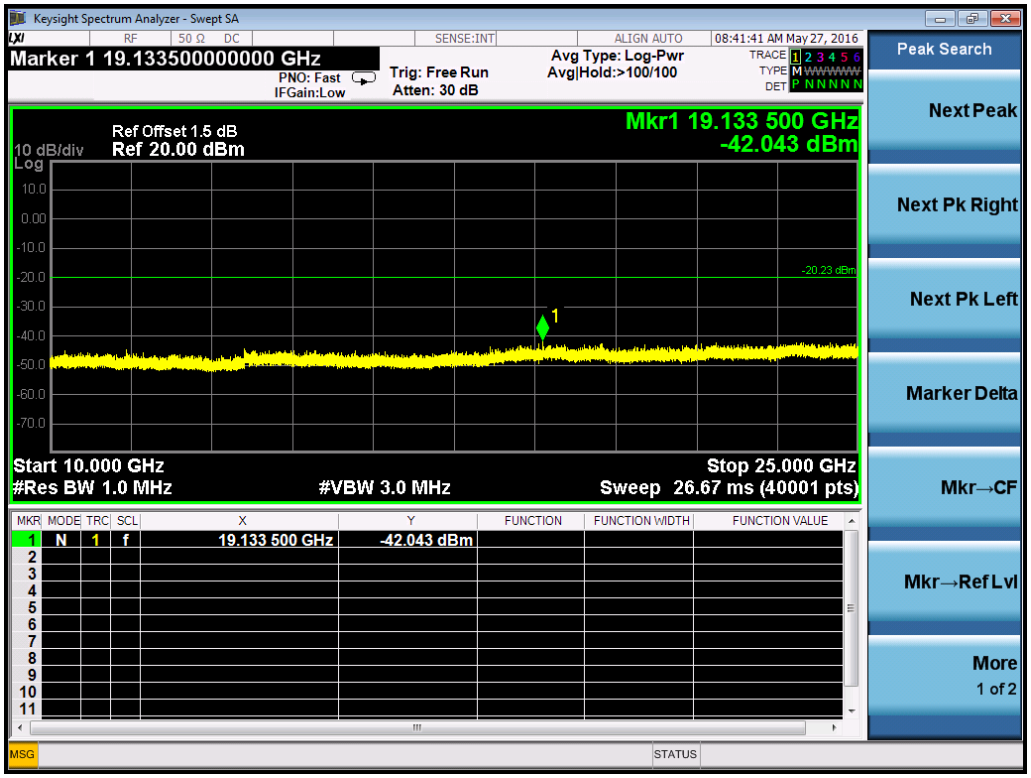




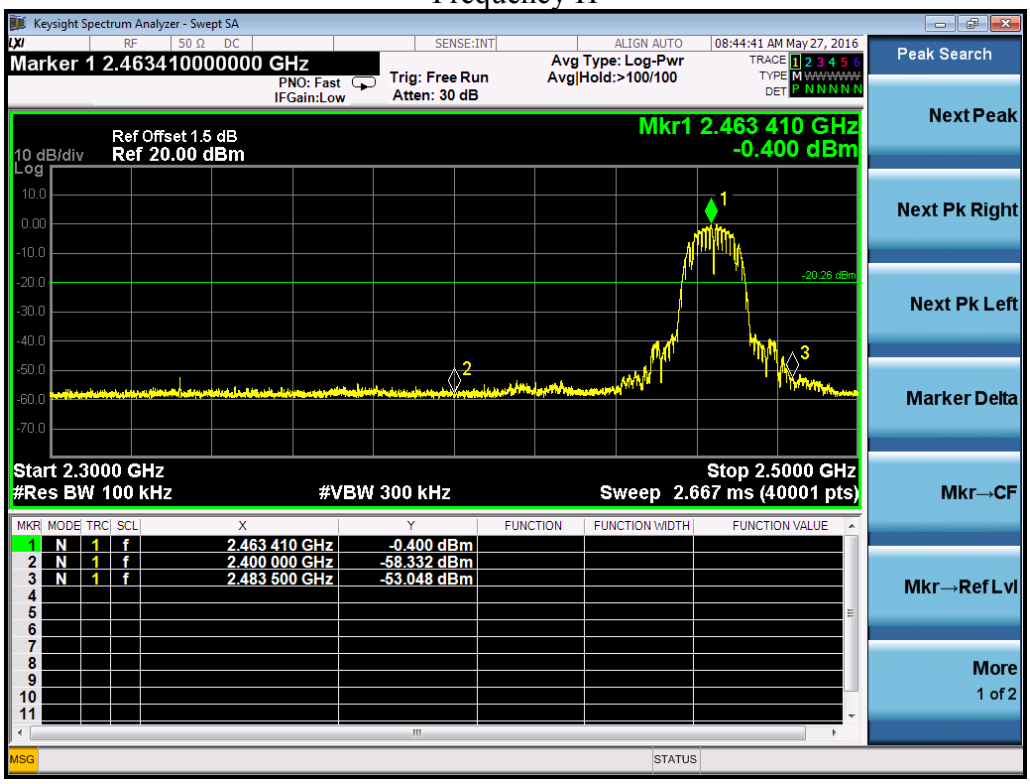
Frequency M

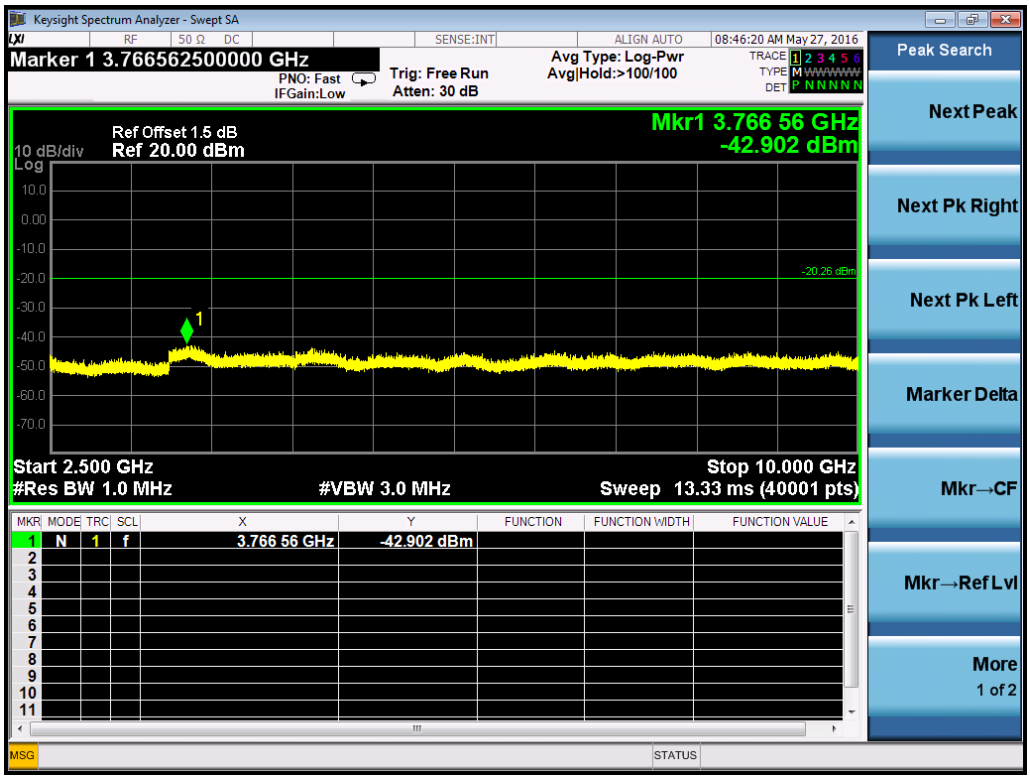


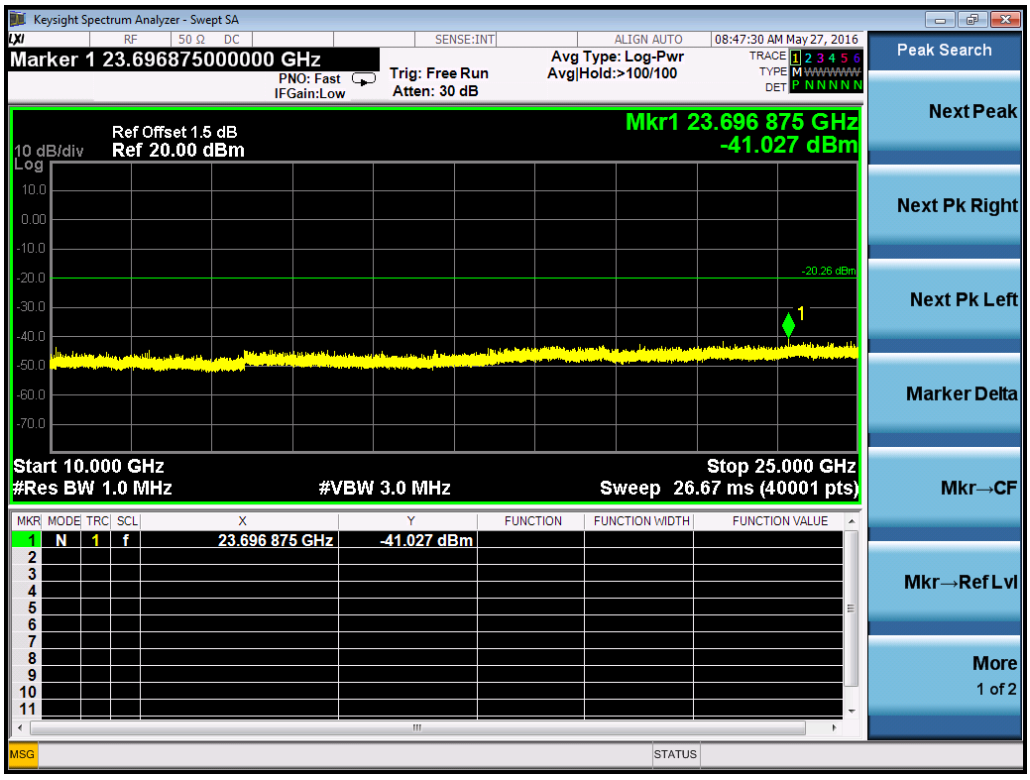




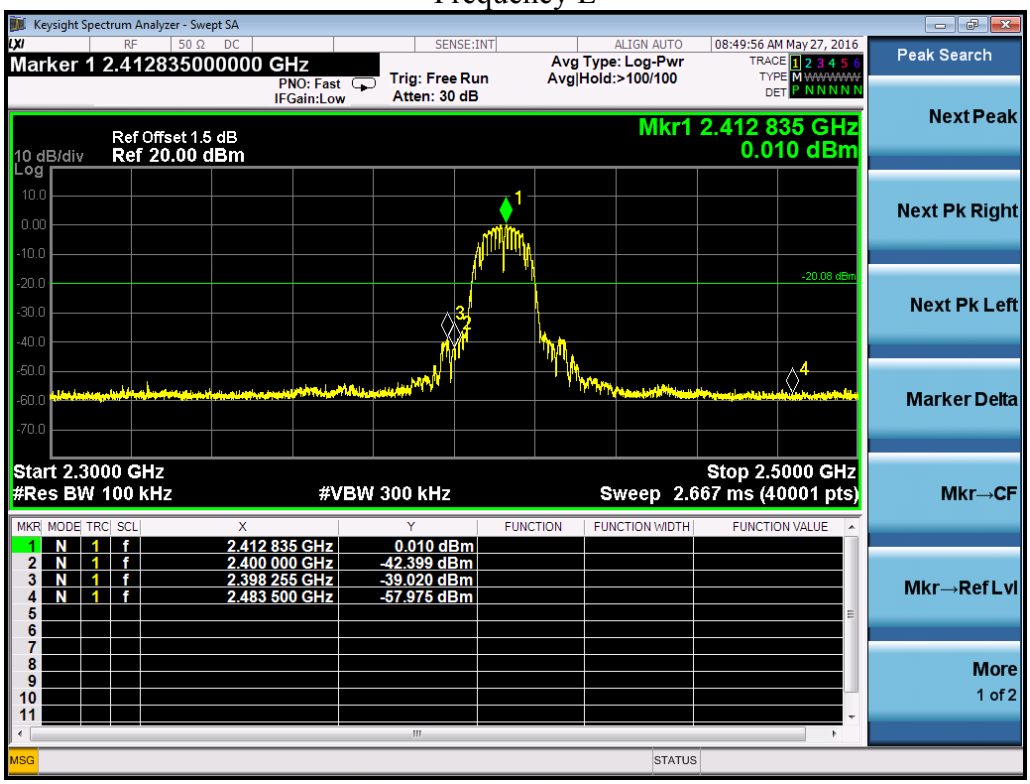
Frequency H

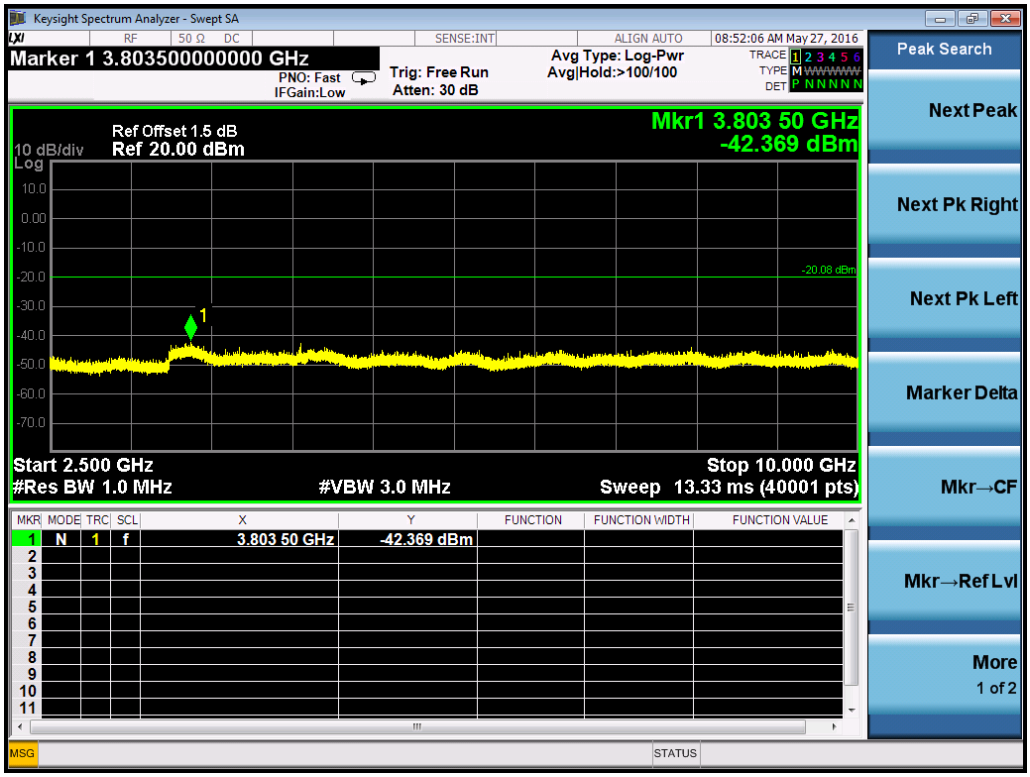


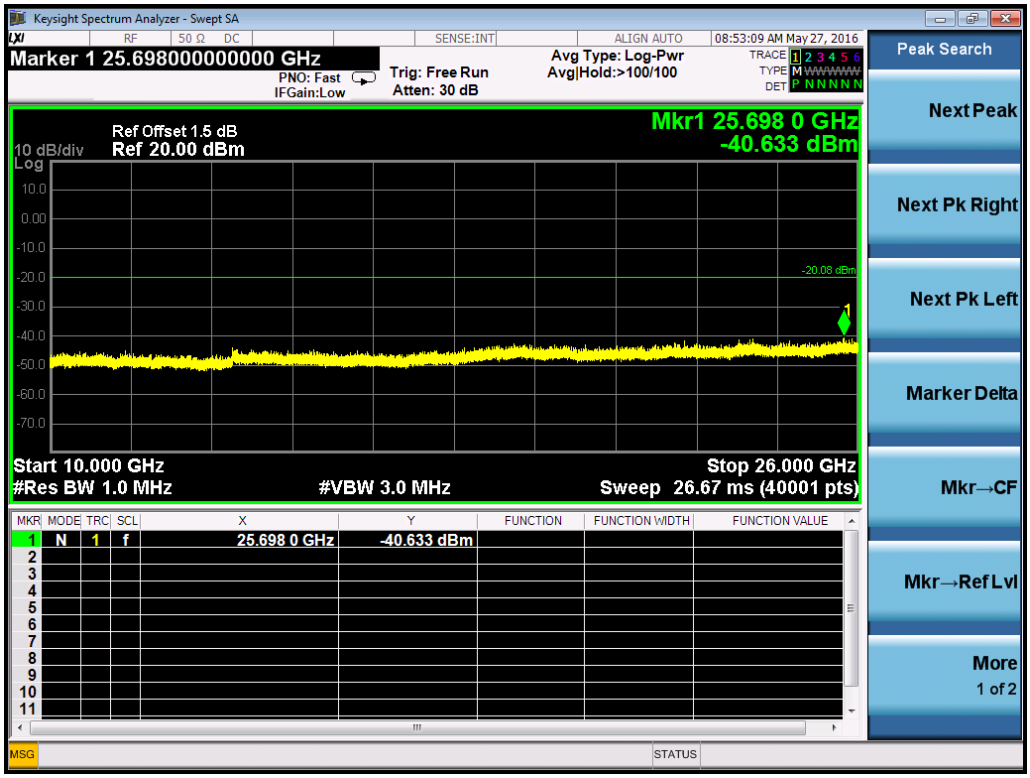




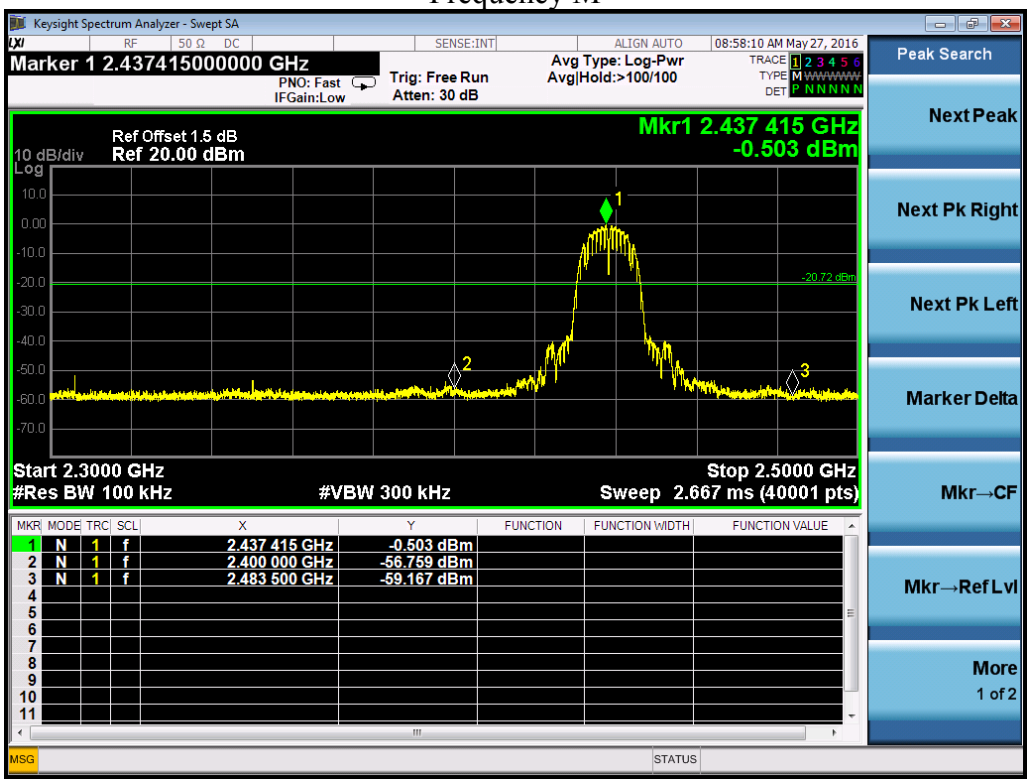
Port B
Frequency L

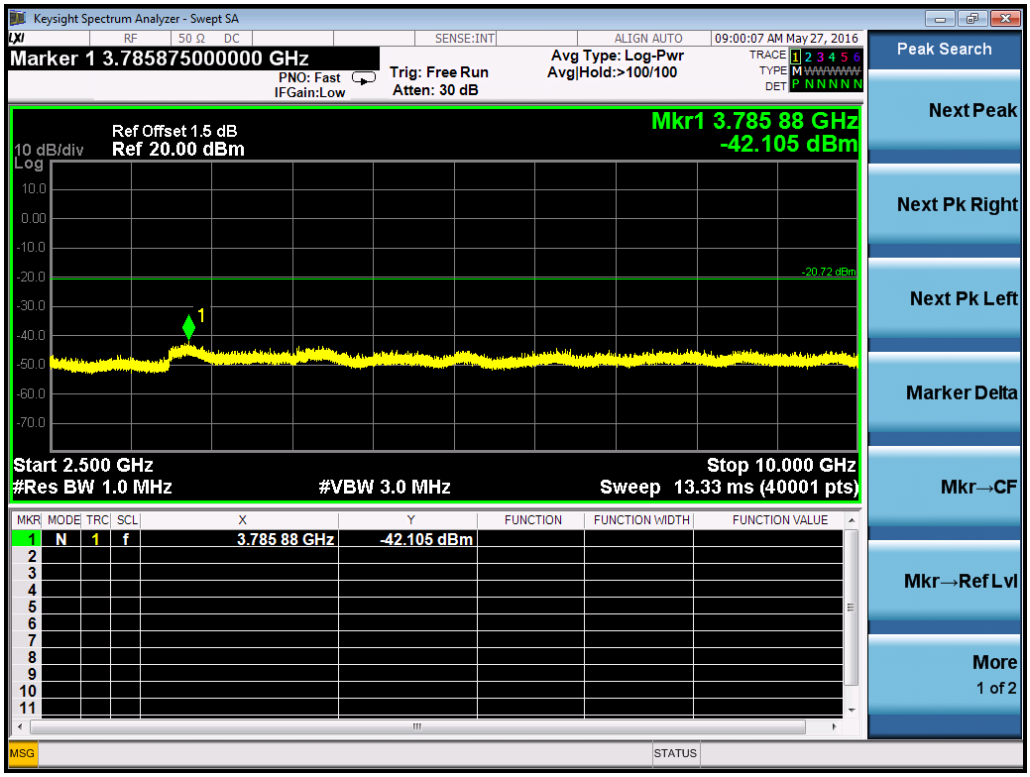


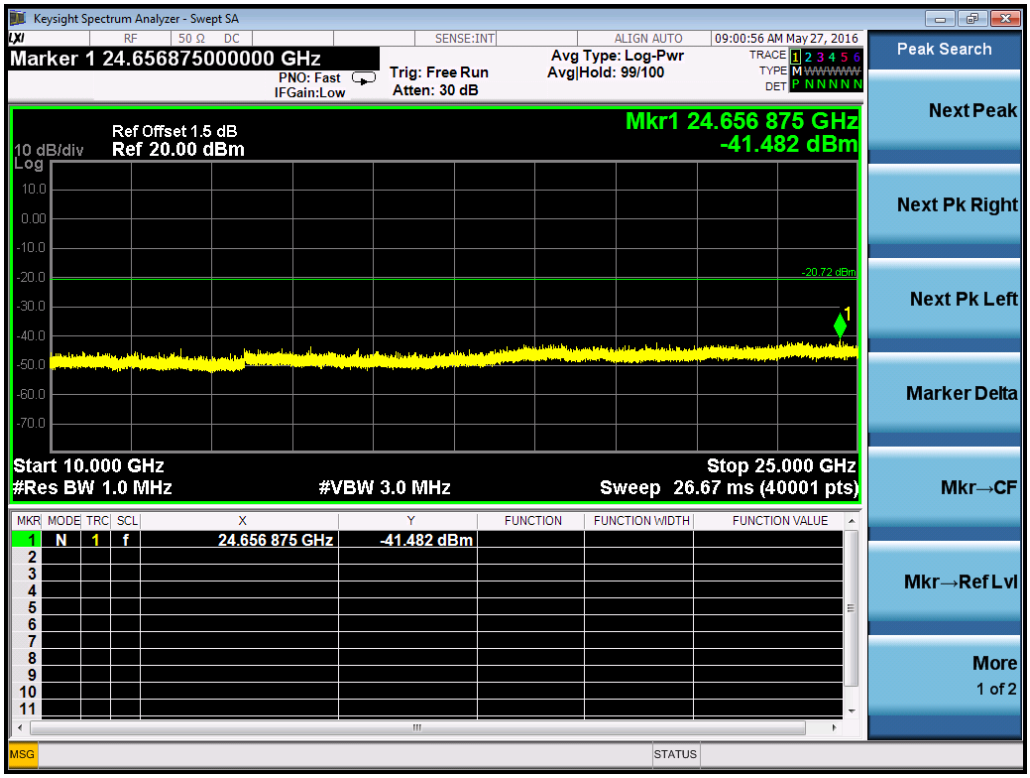




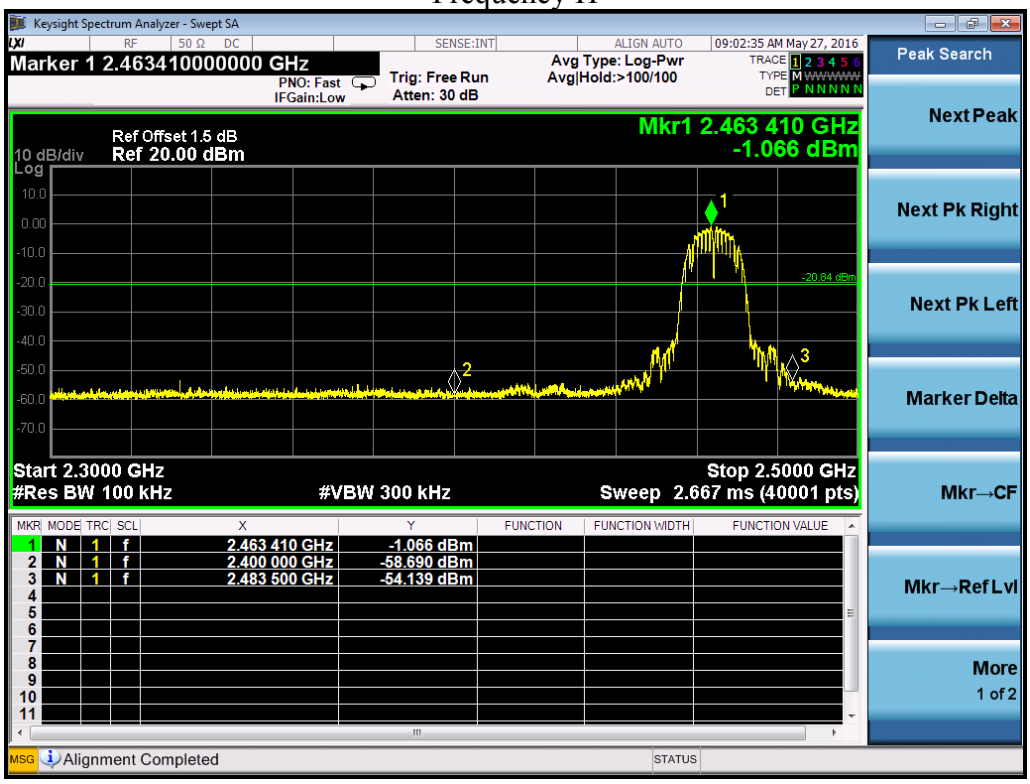
Frequency M

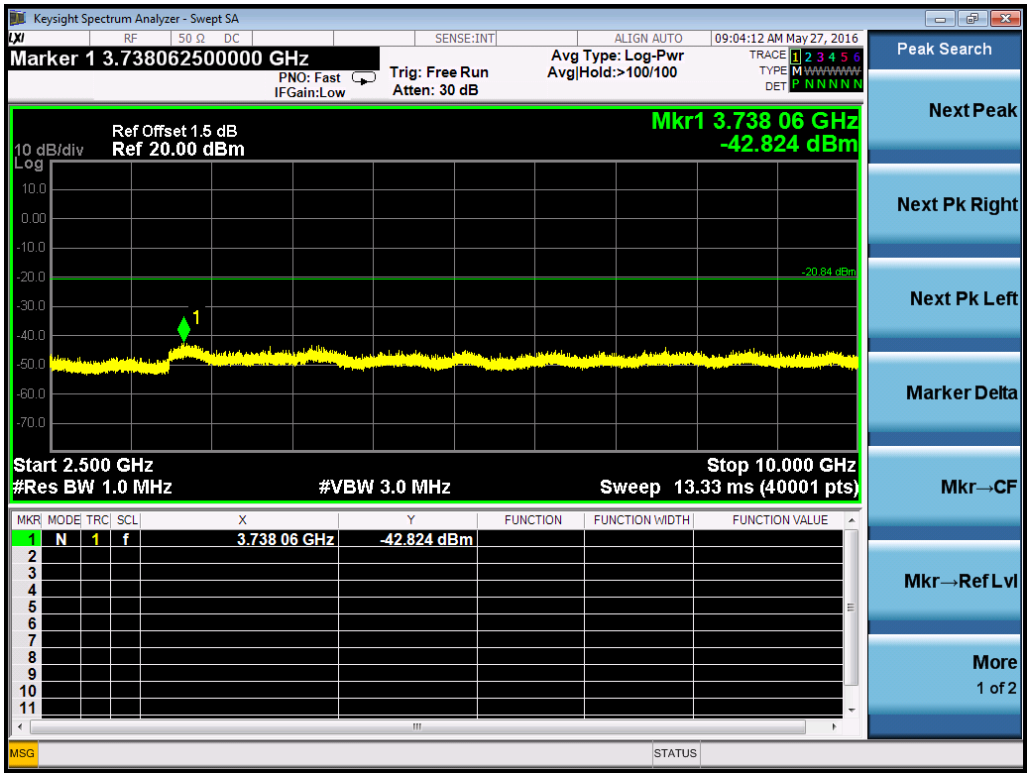


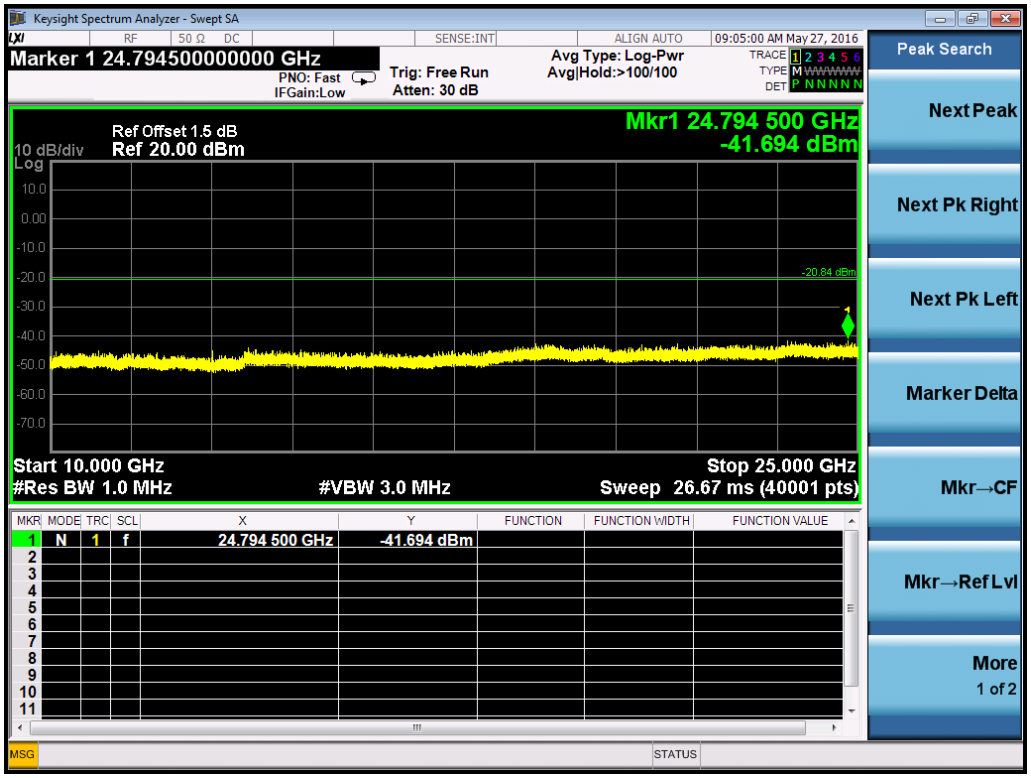




Frequency H







8. Radiated Emissions in restricted frequency bands

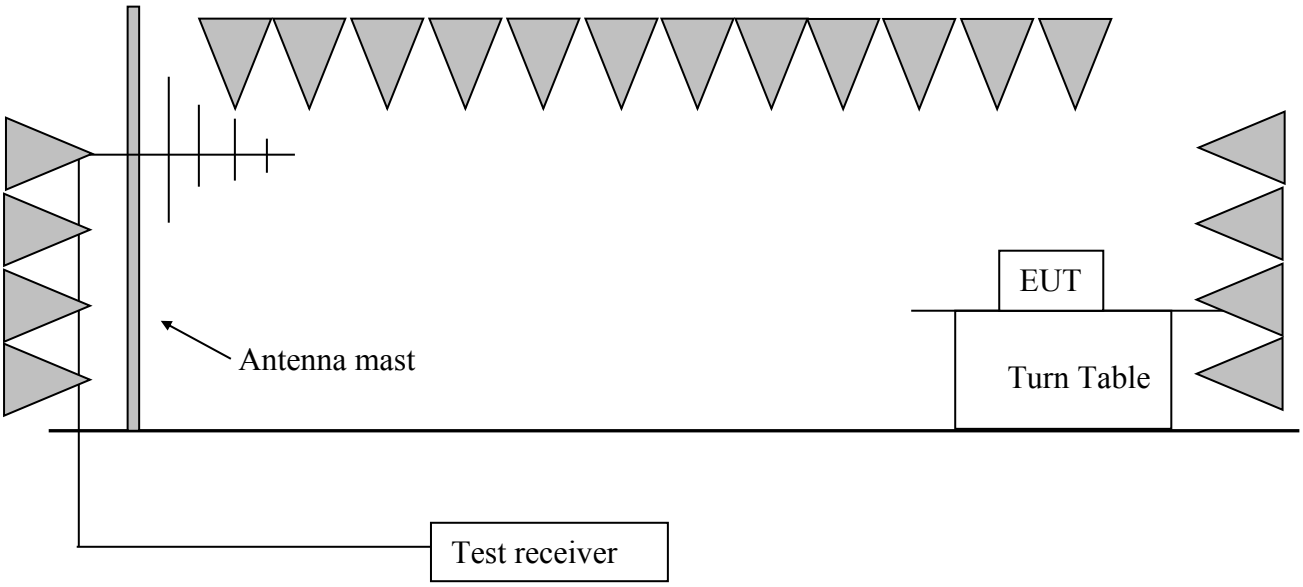
Test result: Pass

8.1 Test limit

The radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) showed as below:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

8.2 Test Configuration



8.3 Test procedure and test setup

The measurement was applied in a semi-anechoic chamber. While testing for spurious emission higher than 1GHz, if applied, the pre-amplifier would be equipped just at the output terminal of the antenna.

Tabletop devices shall be placed on a non-conducting platform with nominal top surface dimensions 1 m by 1.5 m. For emissions testing at or below 1 GHz, the table height shall be 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m.

The turntable rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna which was mounted on an antenna mast. The antenna moved up and down between from 1meter to 4 meters to find out the maximum emission level.

The EUT was tested according to DTS test procedure of KDB558074 D01 DTS "Meas Guidance v03r05" for compliance to FCC 47CFR 15.247 requirements.

The radiated emission was measured using the Spectrum Analyzer with the resolutions bandwidth set as:

RBW = 100 kHz, VBW = 300 kHz (30MHz-1GHz)
RBW = 1MHz, VBW = 3MHz (>1GHz for PK);

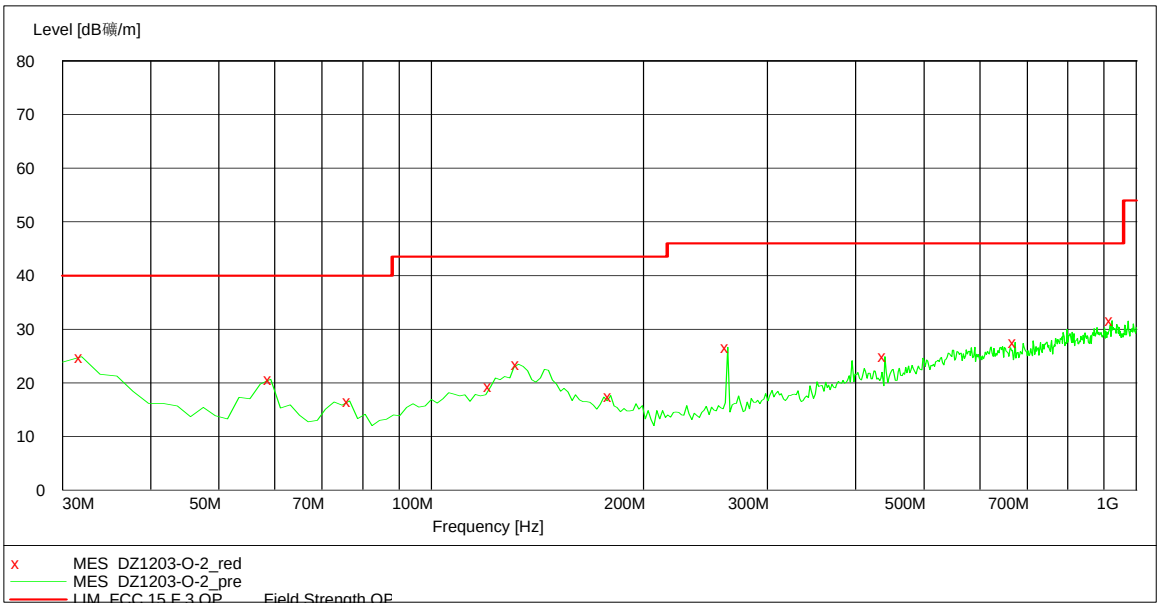
8.4 Test Protocol

Temperature: 25 °C
Relative Humidity: 55 %

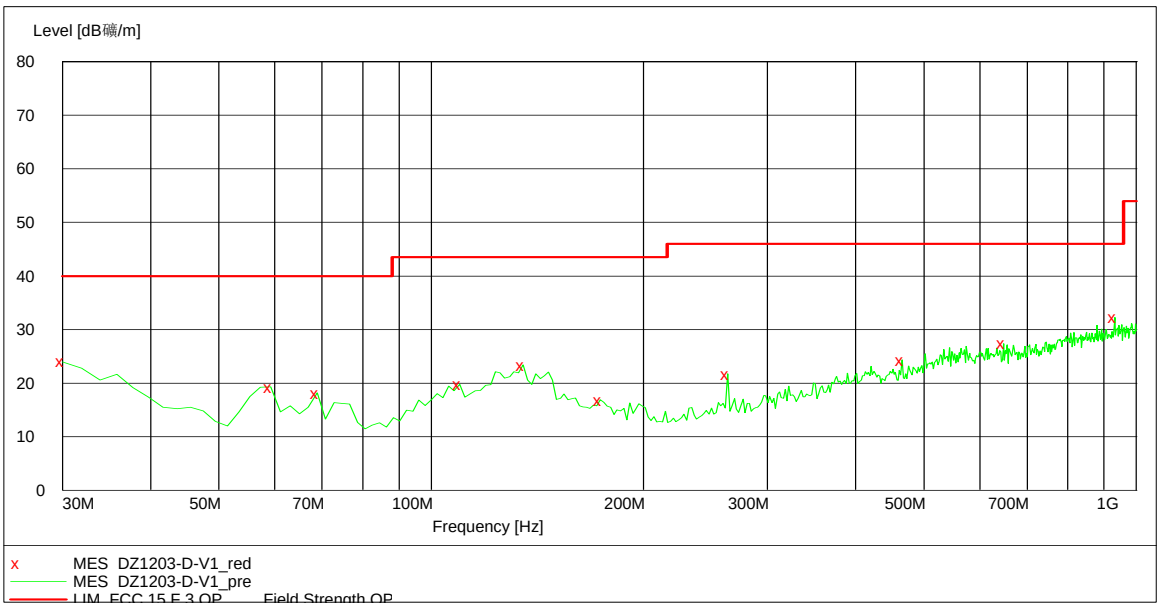
The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

Channel 2412MHz, 30MHz~1GHz, With PCBA (RC1WFI0901A)

Horizontal



Vertical



30MHz~1GHz, Test data:

Polarization	Frequency (MHz)	Correct Factor (dB/m)	Corrected Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
V	37.78	14.00	20.00	40.00	20.00	PK
H	133.03	25.50	15.70	43.50	18.00	PK
H	263.27	24.40	25.20	46.00	20.80	PK
H	440.16	18.90	24.90	46.00	21.10	PK
H	673.43	22.60	27.60	46.00	18.40	PK
H	924.19	25.20	31.60	46.00	14.40	PK

Note: The worst test result (30MHz to 1GHz) of channel L (2412MHz) With PCBA (RC1WFI0901A) was chosen to list in the report as representative.

Remark: 1. Correct Factor = Antenna Factor + Cable Loss (-Amplifier, is employed)
2. Corrected Reading = Original Receiver Reading + Correct Factor
3. Margin = limit – Corrected Reading
4. If the PK reading is lower than QP limit, the QP test can be elided.

Example: Assuming Antenna Factor = 30.20dB/m, Cable Loss = 2.00dB,
Gain of Preamplifier = 32.00dB, Original Receiver Reading = 10dBuV.
Then Correct Factor = 30.20 + 2.00 – 32.00 = 0.20dB/m; Corrected Reading = 10dBuV + 0.20dB/m = 10.20dBuV/m
Assuming limit = 54dBuV/m, Corrected Reading = 10.20dBuV/m, then Margin = 54 -10.20 = 43.80dBuV/m

Test result above 1GHz:
The emission was conducted from 1GHz to 25GHz.

With integral antenna:

Chan. Fre. (MHz)	Polarization	Frequency (MHz)	Correct Factor (dB/m)	Corrected Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
2412	V	2412.00	34.10	97.40	Fundamental	/	PK
	V	2390.00	34.10	59.80	74.00	14.20	PK
	V	2390.00	34.10	48.60	54.00	5.40	AV
	H	4824.00	-3.50	42.80	54.00	11.20	PK
	H	7250.00	2.90	44.20	54.00	9.80	PK
	H	12060.00	7.60	47.00	54.00	7.00	PK
2438	V	2438.00	34.30	100.20	Fundamental	/	PK
	H	4876.00	-3.50	42.80	54.00	16.40	PK
	H	7314.00	2.90	44.20	54.00	9.80	PK
	V	12190.00	7.60	47.00	54.00	7.00	PK
2464	V	2464.00	34.40	97.30	Fundamental	/	PK
	V	2483.50	34.40	54.40	74.00	19.60	PK
	V	2483.50	34.40	44.00	54.00	10.00	AV
	H	4928.00	-3.50	42.80	54.00	11.20	PK
	H	7392.00	2.90	44.20	54.00	9.80	PK
	V	12320.00	10.40	47.00	54.00	7.00	PK

Remark: 1. For fundamental & restrict emission at 2310 - 2390MHz and 2483.5-2450MHz test, no amplifier is employed.
2. Correct Factor = Antenna Factor + Cable Loss (-Amplifier, is employed)
3. Corrected Reading = Original Receiver Reading + Correct Factor
4. Margin = limit – Corrected Reading
5. If the PK reading is lower than AV limit, the AV test can be elided.

Example: Assuming Antenna Factor = 30.20dB/m, Cable Loss = 2.00dB, Gain of Preamplifier = 32.00dB, Original Receiver Reading = 10dBuV. Then Correct Factor = 30.20 + 2.00 – 32.00 = 0.20dB/m; Corrected Reading = 10dBuV + 0.20dB/m = 10.20dBuV/m
Assuming limit = 54dBuV/m, Corrected Reading = 10.20dBuV/m, then Margin = 54 -10.20 = 43.80dBuV/m

With mono-antenna (RC8WFI10042A):

Chan. Fre. (MHz)	Polarization	Frequency (MHz)	Correct Factor (dB/m)	Corrected Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
2412	V	2412.00	34.10	103.20	Fundamental	/	PK
	V	2390.00	34.10	60.80	74.00	13.20	PK
	V	2390.00	34.10	49.40	54.00	4.60	AV
	H	4824.00	-3.50	42.80	54.00	11.20	PK
	H	7250.00	2.90	44.20	54.00	9.80	PK
	H	12060.00	7.60	47.00	54.00	7.00	PK
2438	V	2438.00	34.30	102.40	Fundamental	/	PK
	H	4876.00	-3.50	42.80	54.00	16.40	PK
	H	7314.00	2.90	44.20	54.00	9.80	PK
	V	12190.00	7.60	47.00	54.00	7.00	PK
2464	V	2464.00	34.40	100.50	Fundamental	/	PK
	V	2483.50	34.40	55.60	74.00	18.40	PK
	V	2483.50	34.40	46.10	54.00	7.90	AV
	H	4928.00	-3.50	42.80	54.00	11.20	PK
	H	7392.00	2.90	44.20	54.00	9.80	PK
	V	12320.00	10.40	47.00	54.00	7.00	PK

Remark: 1. For fundamental & restrict emission at 2310 - 2390MHz and 2483.5-2450MHz test, no amplifier is employed.
2. Correct Factor = Antenna Factor + Cable Loss (-Amplifier, is employed)
3. Corrected Reading = Original Receiver Reading + Correct Factor
4. Margin = limit – Corrected Reading
5. If the PK reading is lower than AV limit, the AV test can be elided.

Example: Assuming Antenna Factor = 30.20dB/m, Cable Loss = 2.00dB, Gain of Preamplifier = 32.00dB, Original Receiver Reading = 10dBuV. Then Correct Factor = 30.20 + 2.00 – 32.00 = 0.20dB/m; Corrected Reading = 10dBuV + 0.20dB/m = 10.20dBuV/m
Assuming limit = 54dBuV/m, Corrected Reading = 10.20dBuV/m, then Margin = 54 -10.20 = 43.80dBuV/m

With PIFA antenna (RC1WFI0901A):

Chan. Fre. (MHz)	Polarization	Frequency (MHz)	Correct Factor (dB/m)	Corrected Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
2412	V	2412.00	34.10	104.50	Fundamental	/	PK
	V	2390.00	34.10	62.60	74.00	11.40	PK
	V	2390.00	34.10	52.10	54.00	1.90	AV
	H	4824.00	-3.50	42.80	54.00	11.20	PK
	H	7250.00	2.90	44.20	54.00	9.80	PK
	H	12060.00	7.60	47.00	54.00	7.00	PK
2438	V	2438.00	34.30	105.30	Fundamental	/	PK
	H	4876.00	-3.50	42.80	54.00	16.40	PK
	H	7314.00	2.90	44.20	54.00	9.80	PK
	V	12190.00	7.60	47.00	54.00	7.00	PK
2464	V	2464.00	34.40	105.50	Fundamental	/	PK
	V	2483.50	34.40	58.70	74.00	15.30	PK
	V	2483.50	34.40	48.10	54.00	5.90	AV
	H	4928.00	-3.50	42.80	54.00	11.20	PK
	H	7392.00	2.90	44.20	54.00	9.80	PK
	V	12320.00	10.40	47.00	54.00	7.00	PK

Remark: 1. For fundamental & restrict emission at 2310 - 2390MHz and 2483.5-2450MHz test, no amplifier is employed.
2. Correct Factor = Antenna Factor + Cable Loss (-Amplifier, is employed)
3. Corrected Reading = Original Receiver Reading + Correct Factor
4. Margin = limit – Corrected Reading
5. If the PK reading is lower than AV limit, the AV test can be elided.

Example: Assuming Antenna Factor = 30.20dB/m, Cable Loss = 2.00dB, Gain of Preamplifier = 32.00dB, Original Receiver Reading = 10dBuV. Then Correct Factor = 30.20 + 2.00 – 32.00 = 0.20dB/m; Corrected Reading = 10dBuV + 0.20dB/m = 10.20dBuV/m
Assuming limit = 54dBuV/m, Corrected Reading = 10.20dBuV/m, then Margin = 54 -10.20 = 43.80dBuV/m

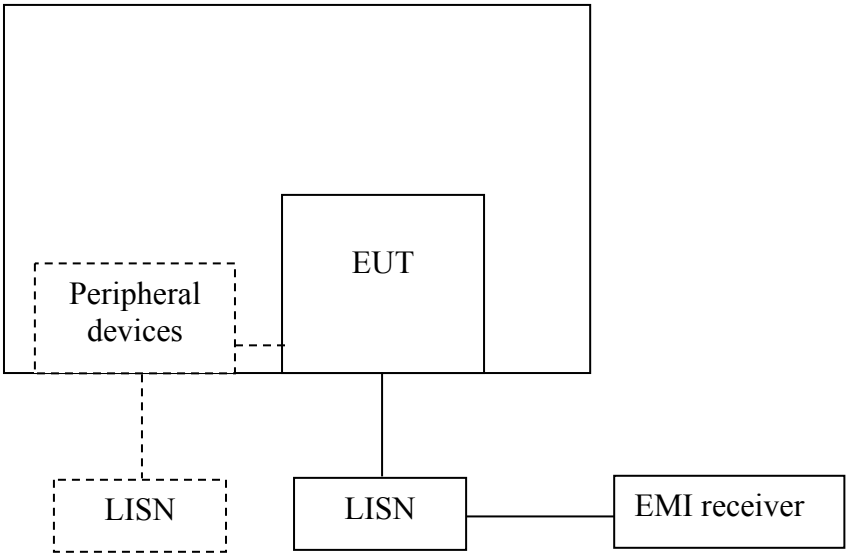
9. Power line conducted emission

Test result: **Pass**

9.1 Limit

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	QP	AV
0.15-0.5	66 to 56*	56 to 46 *
0.5-5	56	46
5-30	60	50
* Decreases with the logarithm of the frequency.		

9.2 Test configuration



☒ For table top equipment, wooden support is 0.8m height table

☐ For floor standing equipment, wooden support is 0.1m height rack.

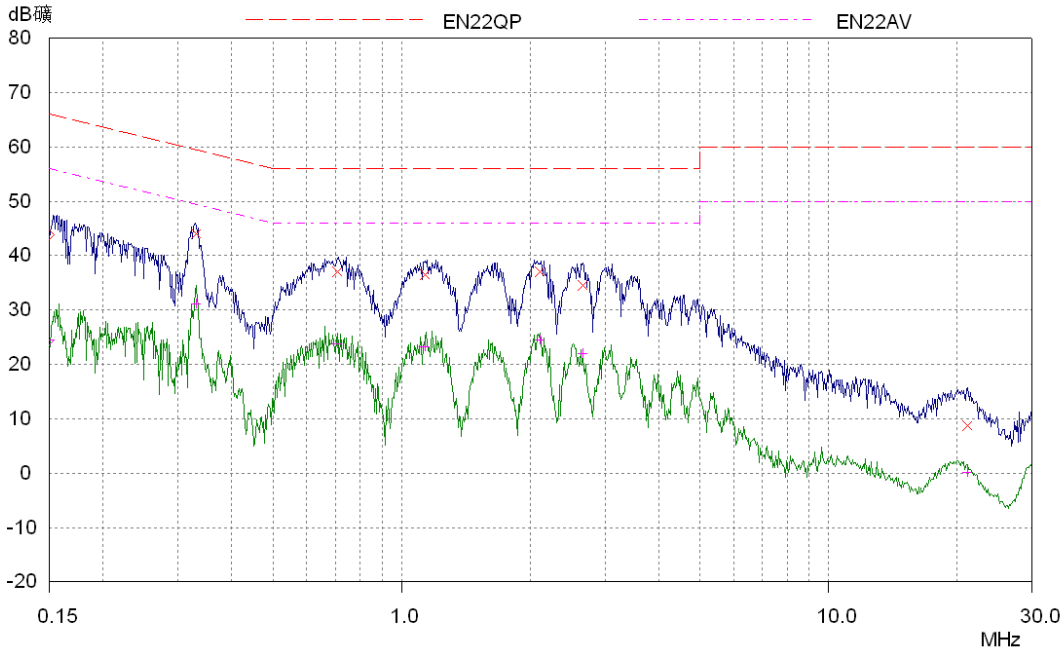
9.3 Test procedure and test set up

The EUT are connected to the main power through a line impedance stabilization network (LISN). This provides a 50Ω/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50Ω/50uH coupling impedance with 50Ω termination.
Both sides (Line and Neutral) of AC line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4 on conducted measurement.
The bandwidth of the test receiver is set at 9 kHz.

9.4 Test protocol

Temperature : 22°C
Relative Humidity : 52%

L&N line



Test Data:

Frequency (MHz)	Quasi-peak			Average		
	level dB(μV)	Limit dB(μV)	Margin (dB)	level dB(μV)	limit dB(μV)	Margin (dB)
0.33	43.95	59.44	15.49	31.05	49.44	18.39
0.71	36.98	56.00	19.02	23.73	46.00	22.27
1.14	36.44	56.00	19.56	23.17	46.00	22.83
2.11	37.07	56.00	18.93	24.48	46.00	21.52
2.66	34.47	56.00	21.53	22.05	46.00	23.95
21.18	8.76	60.00	51.24	0.14	50.00	49.86